

IN THE CLAIMS

Please amend the claims as follows:

Claims 1-13 (Canceled).

Claim 14 (New): A process for producing glass for cathode ray tubes, which comprises:

- melting a raw material in an atmosphere under a pressure of P_0 to obtain a molten glass;
- vacuum degassing the molten glass in an atmosphere under a pressure of P_A , which is less than P_0 ;
- wherein the pressure P of the molten glass is made to be at most $(6.1W+0.06)$ atm in the vacuum degassing step, and wherein W is the content of water in mass %; and
- increasing water content in the raw material to obtain glass having at most 0.1 bubbles/g.

Claim 15 (New): The process for producing glass for cathode ray tubes according to Claim 14, wherein the period of time during which the pressure P of the molten glass is made to be at most $(6.1W+0.06)$ atm, is at least 0.1 hour.

Claim 16 (New): The process for producing glass for cathode ray tubes according to Claim 14, wherein P_0 is from 0.8 atm to 1.2 atm.

Claim 17 (New): The process for producing glass for cathode ray tubes according to Claim 14, wherein W is from 0.005 mass% to 0.05 mass%.

Claim 18 (New): The process for producing glass for cathode ray tubes according to Claim 14, wherein the glass for cathode ray tubes consists essentially of the following oxides:

SiO ₂	45 to 70 mass%,
Al ₂ O ₃	0 to 10 mass%,
Na ₂ O	1 to 15 mass%,
K ₂ O	3 to 15 mass%,
MgO	0 to 10 mass%,
CaO	0 to 10 mass%,
SrO	0 to 13 mass%,
BaO	0 to 16 mass%,
ZnO	0 to 5 mass%,
ZrO ₂	0 to 5 mass%,
TiO ₂	0 to 2 mass%,
CeO ₂	0 to 5 mass%,
B ₂ O ₃	0 to 5 mass%,
Sb ₂ O ₃	0 to 0.19 mass%,
H ₂ O	0.005 to 0.05 mass%,
SnO ₂	0 to 5 mass%, and
SO ₃	0 to 0.4 mass%.

Claim 19 (New): The process for producing glass for cathode ray tubes according to Claim 14, wherein the Sb₂O₃ is from 0 mass% to 0.029 mass%.

Claim 20 (New): The process for producing glass for cathode ray tubes according to Claim 14, wherein the raw material contains no SnO₂.

Claim 21 (New): The process for producing glass for cathode ray tubes according to Claim 14, wherein the raw material comprises SO_3 in an amount that ranges from 0.05 mass% to 0.4 mass%.

Claim 22 (New): The process for producing glass for cathode ray tubes according to Claim 14, wherein said hardened glass comprises at most 0.02 bubbles/g.

Claim 23 (New): The process for producing glass for cathode ray tubes according to Claim 14, wherein bubbles formed during said vacuum degassing have a bubble volume expansion ratio is less than 100; wherein the bubble volume expansion ratio is expressed as a ratio of the average volume of a bubble present in the molten glass in an atmosphere under a pressure P_A to the average volume of a bubble in the molten glass in an atmosphere under a pressure P_0 .

Claim 24 (New): The process for producing glass for cathode ray tubes according to Claim 14, wherein the molten glass in an atmosphere under a pressure P_A is at a temperature from 1250°C to 1350°C.

Claim 25 (New): The process for producing glass for cathode ray tubes according to Claim 14, wherein the vacuum degassing occurs in a vacuum degassing tank and the depth of the molten glass in the vacuum degassing tank ranges from at least 100 mm to at most 400 mm.

Claim 26 (New): A process for producing glass for cathode ray tubes, which comprises:

melting a raw material in an atmosphere under a pressure of P_0 to obtain a molten glass;

vacuum degassing the molten glass in an atmosphere under a pressure of P_A , which is lower than P_0 ;

wherein the pressure P of the molten glass is made to be at most $(6.1W+0.06)$ atm in the vacuum degassing step, and wherein W is the content of water in mass %; and

increasing water content in the molten glass to obtain glass having at most 0.1 bubbles/g.

Claim 27 (New): The process for producing glass for cathode ray tubes according to Claim 26, wherein the period of time during which the pressure P of the molten glass is made to be at most $(6.1W+0.06)$ atm, is at least 0.1 hour.

Claim 28 (New): The process for producing glass for cathode ray tubes according to Claim 26, wherein P_0 is from 0.8 atm to 1.2 atm.

Claim 29 (New): The process for producing glass for cathode ray tubes according to Claim 26, wherein W is from 0.005 mass% to 0.05 mass%.

Claim 30 (New): The process for producing glass for cathode ray tubes according to Claim 26, wherein the glass for cathode ray tubes consists essentially of the following oxides:

SiO_2 45 to 70 mass%,

Al_2O_3 0 to 10 mass%,

Na_2O	1 to 15 mass%,
K_2O	3 to 15 mass%,
MgO	0 to 10 mass%,
CaO	0 to 10 mass%,
SrO	0 to 13 mass%,
BaO	0 to 16 mass%,
ZnO	0 to 5 mass%,
ZrO_2	0 to 5 mass%,
TiO_2	0 to 2 mass%,
CeO_2	0 to 5 mass%,
B_2O_3	0 to 5 mass%,
Sb_2O_3	0 to 0.19 mass%,
H_2O	0.005 to 0.05 mass%,
SnO_2	0 to 5 mass%, and
SO_3	0 to 0.4 mass%.

Claim 31 (New): The process for producing glass for cathode ray tubes according to Claim 26, wherein the Sb_2O_3 is from 0 mass% to 0.029 mass%.

Claim 32 (New): The process for producing glass for cathode ray tubes according to Claim 26, wherein the raw material contains no SnO_2 .

Claim 33 (New): The process for producing glass for cathode ray tubes according to Claim 26, wherein the raw material comprises SO_3 in an amount that ranges from 0.05 mass% to 0.4 mass%.

Claim 34 (New): The process for producing glass for cathode ray tubes according to Claim 26, wherein said hardened glass comprises at most 0.02 bubbles/g.

Claim 35 (New): The process for producing glass for cathode ray tubes according to Claim 26, wherein bubbles formed during said vacuum degassing have a bubble volume expansion ratio is less than 100; wherein the bubble volume expansion ratio is expressed as a ratio of the average volume of a bubble present in the molten glass in an atmosphere under a pressure P_A to the average volume of a bubble in the molten glass in an atmosphere under a pressure P_0 .

Claim 36 (New): The process for producing glass for cathode ray tubes according to Claim 26, wherein the molten glass in an atmosphere under a pressure P_A is at a temperature from 1250°C to 1350°C.

Claim 37 (New): The process for producing glass for cathode ray tubes according to Claim 26, wherein the vacuum degassing occurs in a vacuum degassing tank and the depth of the molten glass in the vacuum degassing tank ranges from at least 100 mm to at most 400 mm.

Claim 38 (New): The process for producing glass for cathode ray tubes according to Claim 26, wherein the increasing water content in the molten glass occurs by burning fuel in the presence of an oxygen gas comprising an oxygen concentration of at least 90 vol%.

DISCUSSION OF THE AMENDMENT

Claims 1-13 are canceled without prejudice.

Claims 14-37 are added.

Support for Claims 14 and 26 is found in original Claim 1, page 10, lines 15-23; and page 20, line 25.

Support for the remaining claims is as follows:

Claims	Support
15, 27	Original Claim 2
16, 28	Original Claim 3
17, 29	Original Claim 4
18, 30	Original Claim 5
19, 31	Original Claim 6
20, 32	Original Claim 7
21, 33	Original Claim 8
22, 34	page 20, lines 23-26
23, 35	page 14, Table 1*
24, 36	page 19, lines 3-5
25, 37	page 19, lines 11-22
38	page 10, lines 19-23

*Support for new claims 23 and 35 is found by calculating a bubble volume expansion ratio from the bubble radius data presented in Table 1 on page 14 $V = \frac{4}{3}\pi r^3$.

No new matter is believed to be added upon entry of the amendment.

Upon entry of the amendment, Claims 14-38 will be active.